

# TEMPERATURE ACTUATED POSITIONING DEVICE FOR NON-LINEAR OPTICAL ELEMENTS

## ABSTRACT OF THE DISCLOSURE

5 Improved devices, systems, and methods use a Non-Linear Optic (NLO) to effect a conversion of an input laser energy to an output energy. The output energy will have a wavelength which is different than the input energy, and the conversion will vary in response to both an angle of the energy relative to the NLO and a temperature of the NLO. Passive control over the angle of the NLO based on thermal expansion of a member  
10 thermally coupled to the NLO can compensate for the temperature-induced change in the conversion so as to maintain a desired output frequency, conversion efficiency, phase matching, and/or the like.

15 PA 3052271 v1